ABSTRACT

CLEAN COPY

A coherent light generating device with low Fresnel loss makes anti-reflection coatings on end surfaces of a wavelength-converting medium unnecessary, while reducing deterioration of anti-reflection coatings and wavelength-converting medium end surfaces. The device comprises a source for generating an excitation beam polarized in a predetermined direction. A wavelength-converting medium receives the excitation beam incident on a first end surface and outputs from a second end surface one or two wavelength-converted beams polarized in the predetermined direction. First and second mirrors provided respectively at the first and second end surfaces reflect wavelength-converted light emitted from the wavelength-converting medium and causing resonance thereof. The first and second end surfaces are oriented so the excitation and wavelength-converted beams reflected respectively by the first and second mirrors are incident at roughly the Brewster's angle, and the polarization of the excitation and wavelength-converted beams is P-polarized with respect to the first and second end surfaces.